projects coming up in joint venture with Tamil Nadu Electricity Board (TNEB) and Gujarat Power Corporation Ltd. Out of these only one Dulanga coal mining blocks has been allotted to NTPC, so far.

(d) Out of the allotted blocks, two coal mines namely, Pakri-Barwadih and Chhatrasal, have been identified for development as basket source and the aggregate coal production from these mining blocks would be around 18 million tonnes per annum (MTPA). Coal from these mines will thus be used to bridge the coal demand-supply gap for NTPC's power plants. Other six blocks will be linked to specific power projects to come up in future. Coal mines to be developed by NTPC/it's Joint Ventures are likely to contribute about 50 MTPA of coal by 2017.

Modernization of Hydro Power Projects

2500. MS. PRAMILA BOHIDAR: Will the Minister POWER be pleased to state:

(a) whether Government have launched a massive renovation, modernization and updating of hydro power projects across the country to augment the hydro-generation;

(b) if so, the details thereof;

(c) whether Government have identified 59 such hydro projects for the purpose and the above programme will result in a benefit of 5,461 MW; and

(d) if so, the details thereof indicating those proposed to be located in Orissa?

THE MINISTER OF POWER (SHRI SUSHILKUMAR SHINDE): (a) Yes, Sir.

(b) Recognizing the benefits of the Renovation and Modernization (R&M), Government of India set up a National Committee in 1987 to formulate strategy on R&M of hydro power projects. Based on the recommendations of the National Committee and subsequent review, a programme for R&M and uprating of hydro power stations was formulated by the Central Electricity Authority. Upto the end of Vlllth Plan, a total of 13 hydro R&M schemes having an installed capacity of 1282 MW were completed giving benefit of 429 MW at a cost of Rs. 127.37 Crores. During the IXth Plan 20 schemes having an installed capacity of 4892.10 MW were completed

a cost of Rs. 570 .1612 crores, accruing a benefit of 1093.03 MW. A;-, per the reviewed Xth Plan programme, 37 hydro R&M schemes having an installed capacity of 5257.85 Mw were planned for completion to accrue a benefit of 774.08 MW at an estimated cost of Rs. 1116.11 crores. Out of these, 21 schemes having an installed capacity of 2457.75 MW have been completed so far at a cost of Rs. 841.8397 crores accruing a benefit of 613.15 MW. The balance 16 schemes having an installed capacity of 2800.1 MW are ongoing and after completion of these schemes, there will be a benefit of 160.93 MW at an estimatea cost of Rs. 342.02 crores.

(c) Yes, Sir.

(d) The Central Electricity Authority has identified 59 hydro projects for R&M during the Xlth Plan which will accrue a benefit of 5461.18 MW at an estimated cost of Rs. 3116.402 Crs. The details of these 59 hydro project;. are given in Statement I and ll (See below) of the above 59 hydro schemes, the following hydro schemes of Orissa are programmed for completion during the Xlth Plan.

(i) Hirakud-I (2x37.5 MW)
(ii) Hirakud-ll (3x24.5 MW)
(iii) Balimela (6x60 MW)

Statement-I

State-wise List of Ongoing Hydro RM&U Projects programmed for completion in the Xlth Plan

SI. No	Project, Agency	Inst.Cap. (MW)	Cost (Rs Estimated	in Crs.) Expend Incurred (Till date)	Benefits (MW)	Category	Likely Completio Schedule
1	2	3	4	5	6	7	8
Himachal Pradesh							
1.	Bhakra LB, BBMB	5x108	203.00	.	540.00 (LE) + 90.00 (U)	RMU&L	2011-12
Jammu & Kashmir							
2.	SalalPh. ll. NHPC	3x115 + 3x115	87.28 (Being rev. to 91.46)	-	-	R&M	2009-10

1 2	3	4	5	6	7	8
Uttar Pradesh						
3 Matatila, UPJVNL	3x10.2	9235	1.00	15(U) + 30.6(LE)	RMU&LE	2008-09
4. Obra, UPJVNL	3x33	14.50	4.56	99.00(LE)	RM&LE	2008-09
5. Rihand, UPJVNL	6x50	136.27	11.58	300.00 (LE)	RM&LE	2009-10
Karnataka						
6. Nagjhari, U-4 to 6, " KPCL	3x135	41.16	5.96	45.00 (U)	RM&U	2008-09
7. Sharavathy Ph. B, KPCL	10x103.5	15.73	-		R&M	2009-10
8 Supa.	2x50	1 55	-	-	R&M	2009-10
9. Nagjhari, U1 to 6, KPCL Kerala	3x150 (Refer S.No.6)	14.35			R&M	2008-09
10. Sabirigiri, KSEB	6x50	97.21 (Being rev. to 98.56)	5332	300.00 (LE) + 35.00 (U)	RMU&LE	2007-08
Tamil Nadu						
11. Sholayar-I, TNEB	2x35	40.68	-	14.00 (U) +70.00 (LE)	RMU&LE E	2007-08
Orissa						
12. Hirakud-ll, OHPC	3x24	125.52	54.46	72.00 (LE)	RM&LE	2008-09
Manipur						
13. Loktak. NHPC	3x35	24.50	-	15.00 (Res)	R&M + Res.	2007-08
TOTAL:	4196.60	984.10	130 88	1625.60 (199(U)+ 1411.60 (LE) + 15 (Res}		

Abbreviations: R&M — Renovation and Modernisation; RM & U — Renovation, Modernisation and Uprating,
RM&LE — Renovation and Modernisation and Life Extension RMU&LE — Renovation and Modernisation, Uprating and Life Extension; R&M + Res. — Renovation & Modernisation + Restoration; RM&LE +Res. — Renovation & Modernisation & Life Extension + Restoration;
RM&U + Res. — Renovation, Modernisation & Uprating + Restoration. MW— Mega Watt; Res—Restoration; U — Uprating; LE— Life Extension.

statement-ll

State-wise List of Hydro RM&U Projects programmed for completion in the Xlth Plan but works of which are yet to be taken up for implementation

SI.. No.	Project, Agency	Inst. Cap (MW)	Estimated Cost (Rs. in Crs)	Benefits (MW)	Category	Likely Completion Schedule
1	2	3	4	5	6	7
Himachal Pradesh						
1.	Dehar, (Ph-A) BBMB	6x165	11.00	—	R&M	2009-10
2.	Dehar.(Ph-B) BBMB	—	49.00	330.00(LE)	RM&LE	Xlth Plan (Likely to be deferred)
3.	Giri.HPSEB	2x33	8.28	66.00 (LE)	RM&LE	Xlth Plan
Jammu & Kashmir						
4.	Chenani, J&KPDC	5x4.66	23.86 (Being rev. to 34.90)	23.30 (LE)+ 2.33 (U)	RMU&LE	Xlth Plan
5.	Ganderbal, J&KPDC	2x3+2X4.5	28.87	15.00 (LE)	RM&LE	Xlth Plan
6.	Sumbal Sindh, J&KPDC	2x11.3	16.372	3.00 (U)	RM&U	Xlth Plan
Uttaranchal						
7.	Dhakrani, UJVNL	3x11.25	27.38	33.75 (LE)	RM&LE	2010-11
8.	Dhalipur, UJVNL	3x17	27.91	51.00 (LE)	RM&LE	2010-11
9.	Tiloth, UJVNL	3x30	38.01	—	R&M	2010-11
10.	Khatima, UJVNL	3x13.8	34.37	41.40 (LE)	RM&LE	2009-10
11.	Pathri, UJVNL	3x6.8	28.69	20.40 (LE)	RM&LE	2009-10

1 2	3	4	5	6	7
12 Kulhal,	3x10	21.62	_	R&M	2010-11
UJVNL					
13. Ramganga, UJVNL	3x66	31.65	18.00(Res)	R&M+Res.	2008-09
Andhra Pradesh					
14. Hampi, APGENCO	2x9(St.l) & 2x9 (St.ll)	25.00	36.00 (LE)	RM&LE	XIthPlan
15. Machkund, APGENCO	3x17 (St.l) & 3x21.25 (St.ll)	124.45	15.25 (U) +114.75 (LE)	RMU&LE	Xlth Plan
16. Tungabhadra, APGENCO	4x9	25.00	36 (LE)	RM&LE	Xlth Plan
17. Nagarjuna Sagar, APGENCO	1x110+ 7x100.8	15.00	15.00 (U)	RM&U	Xlth Plan
18. Upper Sileru, APGENCO	4x60	10.00	—	R&M	Xlth Plan
19. Lower Sileru APGENCO	4x115	200.00	460.00 (LE)	R&M	Xlth Plan
20. Nagarjuna Sagar RBC, APGENCO	3x30	5.00		R&M	Xlth Plan
Karnataka					
21. Bhadra KPCL	2X12	4.75	24 (LE)	R&M	Xlth Plan
22. Lingnamakki, KPCL	2x27.5	2.20	—	RM&LE	2008-09
Kerala					
23. IdukkiSt.l, KSEB	3x130	130.00	390.00 (LE)	RM&LE	Xlth Plan
24. Sholayar, KSEB	3x18	54.00	54.00 (LE)	RM&LE	Xlth Plan
25. Kuttiadi, KSEB	3x25	25.00	75.00 (LE)	RM&LE	Xlth Plan
26. Poringal-kuthu, KSEB	4x8	9.55	32.00 (LE)	RM&LE	Xlth Plan

1	2	3	4	5	6	7
Tamil Nadu						
27.	Periyar, TNEB	4x35	73.8	140.00 (LE)+ 28.00(U)	RMU&LE	2009-10
28.	Moyar.TNEB	3x12	18.00	36.00(LE)	RM&LE	Xlth Plan
29.	KundahSt.l, TNEB	3x20	50 00	60.00 (LE)	RM&LE	Xlth Plan
30.	KundahSt.ll, TNEB	5x35	75.00	175.00 (LE)	RM&LE	Xlth Plan
31.	KundahSt.III, TNEB	3x60	70.00	180.00 (LE)	RM&LE	Xlth Plan
32.	KundahSt.lV, TNEB	2x50	35.00	100.00 (LE)	RM&LE	Xlth Plan
33.	KundahSt.V, TNEB	2x20	13.00	20.00 (LE)	RM&LE of Unit-1 & R&M of U-2	Xlth Plan
34.	Kodayar PH-I, TNEB	1x60	30.00	60.00 (LE)	RM&LE	Xlth Plan
35.	Kodayar PH-II, TNEB	1x40	19.94	40.00 (LE) + 6.00 (U)	RM&LE	Xlth Plan
Jharkhand						
36.	Subernrekha, JSEB	2x65	65.00 (Being Revised)	130.00 (LE)	RM&LE	Xlth Plan
37.	Panchet, U-1,DVC	1x40	44.96	40.00 (LE) +6.00 (U)	RM&LE	2008-09
Orissa						
38.	Balimela, OHPC	6x60	160.00	360.00 (LE)	RM&LE	Xlth Plan
39.	Hirakud-I U5&6, OHPC	2x37.5	94.12 (Being Revised to 92.37)	75.00 (LE)	RM&LE	2009-10
West Bengal						
40.	Maithon U1&3, DVC	2x20	49.05	40.00 (LE) +6.40 (U)	RMU&LE	2009-10
Madhya Pradesh						
41.	Gandhi Sagar, MPPGCL	5x23	46.00	115.00 (LE) +10.00 (U)	RM&LE	Xlth Plan

1 2	3	4	5	6	7
Maharashtra					
42. Koyna-lll, MSPGCL	4x80	150 00	320.00 (LE)	RM&LE	Xlth Plan
43. Koyna Dam PH. MSPGCL	2x18	10.00	8.00 (U)	RM&LE	Xlth Plan
Assam					
44. Kopili, U-1&2, NEEPCO	2x50	36.01 (Likely to be Rev.)		R&M	Xlth Plan
Meghalaya					
45. UmiumStli, MESEB	2x9	90.46	18.00 (LE)	RM&LE	2008-09
46. Kyrdemkulai, MESEB	2x30	25.00	6.00 (U)	RM&LE	Xlth Plan
TOTAL:	6128.80	2132.302	3835.58 [105.98(U)+3711.60 (LE) +18(Res.)]		

Abbreviations: R&M — Renovation & Modernization; RM& U — Renovation, Modernization & Uprating, RM&LE — Renovation, Modernization & Life Extension RMU&LE — Renovation, Modernization , Uprating & Life Extension; R&M+Res. - Renovation & Modernization + Restoration; R&M&LE+Res, - Renovation, Modernization & Life Extension + Restoration; RM&U+Res.- Renovation Modernization & Uprating + Restoration. MW — Mega Watt; Res — Restoration; U — Uprating; LE — Life Extension.

Joint venture of NTPC and Coal India Ltd. for power generation

2501. MS. PRAMILA BOHIDAR: Will the Minister of POWER be pleased to state:

(a) whether NTPC and Coal India Ltd. propose to set up 4,000 MW power generation plant in Orissa;

(b) if so, the details thereof; and

(c) the time-frame within which the joint venture would be made functional?